

Page 12, line 12, delete "or  $\text{BF}_3$ ";

Page 14, line 9, change "boron (B) or  $\text{BF}_3$ " to --boron fluoride ( $\text{BF}_2$ )--

**IN THE CLAIMS:**

Please amend claims 1, 7, 9, 10, 12, 14, 18, and 19 as follows.

1. (Amended) A method for fabricating a semiconductor device comprising:  
forming a device isolation region on a semiconductor substrate to define a cell  
array region and a peripheral circuit region;  
forming a first gate in the cell array region, a second gate in the peripheral circuit  
region, and a third gate in the peripheral circuit region;  
implanting first impurity ions of a low concentration into a first portion of the  
semiconductor substrate adjacent to the second and third gates, using the second and third  
gates as a mask, to form a first impurity diffusion region of a first conductivity type;  
forming first gate spacers on lateral sides of the first, second, and third gates;  
implanting second impurity ions of a low concentration into a second portion of  
the semiconductor substrate adjacent to the first gate and first gate spacers, using the first  
gate and first gate spacers as a mask, to form a second impurity diffusion region of a first  
conductivity type;  
implanting third impurity ions of a low concentration into a third portion of the  
semiconductor substrate adjacent to the third gate and the first gate spacers on the lateral

16 side of the third gate, using the third gate and first gate spacers as a mask, to form a third  
17 impurity diffusion region of a second conductivity type;  
18 forming an insulating layer over the semiconductor substrate, first through third  
19 gates, and first gate spacers;  
20 etching the insulating layer in the peripheral region to form second gate spacers  
21 adjacent to the first spacers on the lateral side of the second and third gates, respectively  
22 [adjacent to the second and third gates];  
23 implanting fourth impurity ions of a high concentration into a fourth portion of the  
24 semiconductor substrate adjacent to the second gate and the second spacers on the lateral  
25 sides of the first spacers of the second gate, using the second gate and the first and second  
26 spacers as a mask, to form a fourth impurity diffusion region of a first conductivity type;  
27 and  
28 implanting fifth impurity ions of a high concentration into a fifth portion of the  
29 semiconductor substrate adjacent to the third gate and the second spacers on the lateral  
30 side of the third gate, using the third gate and first and second spacers as a mask, to form  
31 a fifth impurity diffusion region of a second conductivity type.

1 7. (Amended) A method for fabricating a semiconductor device, as recited in  
2 claim 1, wherein the implanting of third impurity ions is performed using boron [or  $\text{BF}_3$ ]  
3 with a dose range of about  $1 \times 10^{13}$  ions/cm<sup>2</sup> and at an energy range of about 20 keV.

c  $\beta^3$   
1 9. (Amended) A method for fabricating a semiconductor device, as recited in  
claim 1, wherein the implanting of fifth impurity ions is performed using ~~boron fluoride~~  
3 ~~(BF<sub>3</sub>)~~ [boron or BF<sub>3</sub>] with a dose range of about  $5 \times 10^{15}$  ions/cm<sup>2</sup> and at an energy range of  
4 about 20 keV.

1 10. (Amended) A method for fabricating a semiconductor device, as recited in  
2 claim 1, further comprising:  
3 forming a silicide layer over the semiconductor substrate, the second gate, and the  
4 third gate in the peripheral circuit region; and  
5 forming an interlayer insulating layer over the substrate and first through third  
6 gates;  
7 etching a selected portion of the interlayer insulating layer in the cell array region,  
8 using the insulating layer as [for] an etching stopper, and forming a contact opening  
9 adjacent to the first gate.

$\beta^4$   
1 12. (Amended) A method for fabricating a semiconductor device, as recited in  
claim 11, wherein during the annealing of the substrate and the transition [,]metal, the  
3 first through fifth impurities are diffused into the first through fifth impurity diffusion  
4 regions, respectively.